

CLAIMS

What is claimed is:

1. A fastener comprising:

a shank having a central portion with a distal end and a base end and a pair of curved, flexible flanges secured at a leading edge thereof to the central portion of the shank on opposing sides thereof, each of the flanges curving away from the central portion of the shank, a trailing edge of each flange extending generally unsupported between the distal end of the shank and the base end of the shank, each of the flanges defining a shoulder adjacent the base end of the shank;

a head secured to the base end of the central portion of the shank in generally perpendicular relation thereto, a top portion of the trailing edge of each of the respective flanges being secured to the head of the fastener by a tab that extends between the flange and the head of the fastener, the head and the flanges of the fastener being constructed and arranged to define an aperture therebetween for receiving and retaining a panel therebetween; and,

a cored-out section formed into the central portion of the shank such that as the shank of the fastener is inserted into a bore formed through the panel, inwardly directed forces applied to the flanges are transmitted from the flanges to the central portion of the shank which then deforms into the cored-out section thereof so as to lower the force required to insert the fastener into the bore formed through the substrate.

2. A fastener comprising:

a shank having a central portion with a distal end and a base end and a pair of curved, flexible flanges secured at a leading edge thereof to the central portion of the shank on opposing sides thereof, each of the flanges curving away from the central portion of the shank, a trailing edge of each flange extending generally unsupported between the distal end of the shank and the base end of the shank, each of the flanges defining a shoulder adjacent the base end of the shank;

a head secured to the base end of the central portion of the shank, the head and the flanges being constructed and arranged to define an aperture therebetween for receiving and retaining a panel therebetween; and,

a cored-out section formed into the central portion of the shank such that as the shank of the fastener is inserted into a bore formed through the panel, inwardly directed forces applied to the flanges are transmitted from the flanges to the central portion of the shank which then deforms toward the cored-out section thereof so as to lower the force required to insert the fastener into the bore formed through the substrate.

3. The fastener of claim 2 wherein a top portion of the trailing edge of each of the respective flanges is secured to the head of the fastener by a tab that extends between the flange and the head of the fastener.

4. The fastener of claim 2 wherein the head comprises at least one flange secured to the base end of the central portion of the shank in generally perpendicular relation thereto.

5. The fastener of claim 2 wherein the head of the fastener comprises a laterally extending lip that is biased toward the shank of the fastener.
6. The fastener of claim 2 wherein the head comprises a connecting structure constructed and arranged to be removably received and retained in a doghouse.
7. The fastener of claim 6 wherein the head of the fastener also comprises a laterally extending lip that is biased toward the shank of the fastener.